

CLAIMS

1. A vehicle steering apparatus in which a housing for supporting coaxially to a steering shaft a rotating cylinder that is provided with a screw mechanism constructed between itself and said steering shaft for moving in an axial direction for the purpose of steering and that is rotated by transmission from a steering motor is constructed in a separated form consisting of first and second housings fit to each other by spigot-joint fitting on an outer side of a retaining part of a thrust bearing for thrust-supporting said rotating cylinder, wherein

a gap is provided in a part that constitutes a part of the spigot-joint fitting part of said first and second housings and that is located on an outer side of a fixing nut screwed into said retaining part in order to apply a tightening force on said thrust bearing from one side.

2. The vehicle steering apparatus according to claim 1, wherein said screw mechanism is a ball screw mechanism constructed by engaging via a large number of balls a screw groove formed in an outer periphery of said steering shaft with a screw groove formed in an inner periphery of said rotating cylinder.

3. The vehicle steering apparatus according to claim 1, comprising an escape stopping ring that contacts with an end face of

said fixing nut from an opposite side of said thrust bearing.

4. The vehicle steering apparatus according to claim 1, wherein said thrust bearing is a twin angular contact ball bearing having a common outer race tightened by said fixing nut.

5. The vehicle steering apparatus according to claim 1, wherein said thrust bearing is a shield bearing provided with a shield member on both sides of rolling elements.

6. The vehicle steering apparatus according to claim 1, wherein said rotating cylinder has, in an outer periphery, a gear wheel that engages with a pinion of an output shaft of said steering motor.

7. The vehicle steering apparatus according to claim 6, wherein said gear wheel has resin gear teeth.